



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 2
290 BROADWAY
NEW YORK, NY 10007-1866

DEC 18 2013

Andrea Adewale-Adebawale
Director
City of Newark
Department of Water and Sewer Utilities
Division of Sewer and Water Supply
239 Central Avenue
Newark, New Jersey 07103

Dear Ms. Adewale-Adebawale:

This is in response to your request to the U.S. Environmental Protection Agency (EPA) for a Categorical Exclusion (CATEX) from substantive environmental review requirements, pursuant to 40 CFR Part 6, for the City of Newark's proposed Queen Ditch Restoration project located in Essex County, New Jersey. As the grantee is seeking partial funding through a federal Special Appropriation Act Project grant, the lead federal agency must comply with the National Environmental Policy Act (NEPA).

The Queen District Drainage area (drainage area) in the City of Newark, adjacent to Newark International Airport, experiences frequent sewage back-ups along with surcharge and surface flooding. This problem recurs during heavy precipitation events and creates safety and public health concerns. This drainage area consists of a combined sewer overflow (CSO) system which connects to a network of ditches that drain former tidal marshes and conveys wet weather combined flows to the Newark Bay through the Peripheral Ditch. One CSO point receives combined overflows from the drainage area, which was formerly served by Queen Ditch, a manmade open-channel drainage ditch that operated in the past and is currently in disrepair and blocked off at the Queen District Diversion Chamber (diversion chamber) located at the western end of International Way. The 380-foot long Queen Ditch has collapsed and is currently ill-defined, filled in with significant sediment deposits, and overgrown with vegetation. Currently, combined overflows are directed to the South Side Interceptor during heavy rainfalls causing overloading and surcharging of the interceptor; thereby, flooding the drainage area. Consequently, this creates vehicular and pedestrian traffic safety concerns, and impacts residential properties and structures at the intersection of Frelinghuysen Avenue, Noble Street, and the Meeker Avenue underpass at Route 22. For the purpose of providing flood relief, the former Queen Ditch needs to be restored to its original ditch capacity and reactivated to accept combined overflows.

Queen Ditch is currently heavily silted to the point where the majority of the twin culverts under Route 22 are blocked. Vegetation within the former Queen Ditch footprint just south of the Route 22 twin culvert consists of New Jersey Department of Environmental Protection (NJDEP) freshwater deciduous wooded/herbaceous wetlands of intermediate resource value. The Queen Ditch connects to the Peddie Ditch approximately 100 feet downstream of the Route 22 twin culvert. Peddie Ditch is identified as State open waters with vegetation classified as NJDEP herbaceous wetlands and tidal wetlands under National Wetland Inventory (NWI). Vegetation within the upland area from the Route 22 twin culvert to Peddie Ditch is not NWI or State wetlands. However, State wetlands that exist within the former Queen Ditch are currently under the NJDEP's jurisdiction for protection.

To alleviate sewage back-ups and flooding in the drainage area, the proposed project involves dredging the former Queen Ditch, cleaning out the twin culverts, and constructing a box culvert from the existing diversion chamber to the proposed Queen Ditch inlet. The 108-inch wide by 60-inch high by 460-foot long precast concrete box culvert will be installed in the same footprint as the former Queen Ditch and currently an asphalt parking lot bordered by vegetation on two sides. This underground box culvert will traverse the asphalt parking lot and a swath of grass on one side and light vegetation on the opposite side. The parking lot and vegetated areas will be temporarily disturbed by excavation activities to install the culvert; subsequently, the parking lot will be repaved and surrounding soils will be graded and replanted with grass as part of restoration. Additionally, a 12-foot wide by 22-foot long by 6-foot high netting facility followed by a 9-foot high by 5-foot wide tide gate will be installed at the end-of-pipe to transition from the new box culvert to the drainage ditch inlet. This combined structure will capture trash and floatables from overflows during wet weather events and prevent backflows from entering the CSO system during extreme flooding that may occur during high tides and/or storm surges.

The proposed dredging activities for the Queen Ditch consist of removing all vegetation and dredging approximately six feet of sediment from the channel bottom from the new box culvert outlet to the point of confluence with Peddie Ditch. After dredging, the channel and outfall will be shaped to the similar geometry and dimensions as the original Queen Ditch. Project activities upstream of the Route 22 twin culvert are outside the 100-year floodplain; therefore, no floodplain impacts are anticipated. However, dredging operations downstream of the Route 22 twin culvert, more towards Peddie Ditch, will be within the tidally influenced floodplain. There will be no fill placed in the floodplain and no change in the existing ratio of pervious/impervious ground cover will occur. Major drainage flow patterns will not be altered during construction activities and erosion will not result from construction activities. After restoring the Queen Ditch, the channel will be able to accommodate its original flow capacity of 750 cubic feet per second.

Upon project completion, the diversion chamber will be reactivated to reintroduce overflows to the restored Queen Ditch, which will reduce the frequency of current surcharging and surface flooding conditions in the drainage area. Further, this project will enhance public health and safety by safely rerouting combined sewer overflows away from populated areas.

In order to avoid impacts, the following will be implemented:

- A NJDEP Freshwater Wetlands General Permit will be obtained.
- A NJDEP Flood Hazard Area General Permit will be obtained.
- A NJDEP State Pollutant Discharge Elimination System Permit will be obtained.
- Sediment dredged will be tested for contamination. Any contaminated material will be contained and disposed in an acceptable disposal site consistent with NJDEP's requirements.
- A stringent dewatering/soil erosion and sedimentation control plan will be developed and implemented to protect the Peddie Ditch stream and its surrounding wetlands.
- Any necessary replanting will be done with native species, use of invasive and non-native species will be avoided.

With these activities carried out, the project meets the CATEX eligibility criteria found in 6.204(a)(1)(ii) of EPA's NEPA implementing regulations. This category includes "actions relating to existing infrastructure systems (such as sewer systems, drinking water supply systems, and stormwater systems, including combined sewer overflow systems) that involve minor upgrading, or minor expansion of system capacity or rehabilitation (including functional replacement) of the existing system and system

components (such as the sewer collection network and treatment system; the system to collect, treat, store and distribute drinking water; and stormwater systems, including combined sewer overflow systems) or construction of new minor ancillary facilities adjacent to or on the same property as existing facilities."

This project does not involve a new or relocated discharge to surface or ground water, an increase in the volume or loading of pollutants to receiving water, or capacity to serve a population 30 percent greater than the existing population. Further, it is not contrary to any state or regional growth plan or strategy; and it is not primarily for the purpose of future development.

Additionally, the available information you provided concerning the proposed action indicates that none of the specific criteria for not granting a CATEX, found in 40 CFR 6.204(b)(1) through (b)(10), are present.

Based on our review, EPA approves the request for the CATEX. Please be reminded that EPA may revoke this CATEX if any of the following conditions occur:

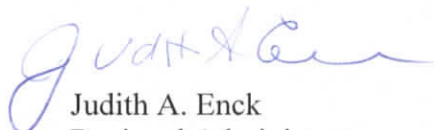
- changes in the proposed action render it ineligible for exclusion,
- new evidence indicates that serious local or environmental issues exist, or
- federal, state, or local laws would be violated, or
- the implementation measures listed above are not followed.

In a closely related matter, EPA recommends that the City of Newark utilize environmentally sustainable practices during all phases of projects, including planning, environmental review, design, and construction. For your information and dissemination, we are enclosing recommendations for your consideration in this and future projects. EPA encourages environmental sustainability as a standard part of all projects.

This CATEX will be available on the EPA website at <http://www.epa.gov/region02/spmm/r2nepa.htm>.

Should you have any questions regarding this decision, please address them to Grace Musumeci, Chief, Environmental Review Section, at the above address.

Sincerely,



Judith A. Enck
Regional Administrator

Enclosure

cc: J. Beckmeyer, City of Newark
J. George, City of Newark
C. Patackis, P.E., CDM Smith
R. Pennington, CDM Smith

EPA Region 2 Green Project Recommendations and Resources May 2013

EPA strongly encourages that the concepts outlined below be considered by those receiving federal grant assistance for water, wastewater, stormwater, or water quality protection projects. In this regard, project sponsors are encouraged to use local and/or recycled materials; to recycle materials generated onsite; to utilize low-emissions technologies and fuels; and to incorporate renewable-energy (e.g., solar, wind, geothermal, biogas, and biomass) and energy-efficient and environmentally sustainable technology in project design, construction, and operation.

- **Utilize Clean Diesel Technology** <http://www.epa.gov/otaq/diesel/>

Diesel controls, cleaner fuel, and cleaner construction practices can be utilized for both on-road and off-road equipment used for transportation, excavation, and other construction activities. Particular consideration should be given to the following concepts:

- 1) Strategies and technologies to reduce unnecessary idling, including auxiliary power units, the use of electric equipment, and establishing and enforcing limits on idling time.
- 2) The use of ultra low sulfur diesel fuel in non-road applications.
- 3) The use of add-on control technologies like diesel oxidation catalysts and particulate filters, repowering, or newer, cleaner diesel equipment.
<http://www.mass.gov/dep/air/diesel/connetro.pdf>
- 4) Contract specifications can be used to require contractors to use advanced pollution controls and clean fuels. A model specification is available online at
<http://www.northeastdiesel.org/pdf/NEDC-Construction-Contract-Spec.pdf>.

- **Use Alternative and Renewable Energy**

The U.S. Department of Energy's "Green Power Network" (GPN) provides information and markets that can be used to supply alternative generated electricity. The following link identifies several suppliers of renewable energy.

http://apps3.eere.energy.gov/greenpower/buying/buying_power.shtml

- **Incorporate onsite energy generation and energy efficient equipment upgrades into projects at drinking water and wastewater treatment facilities**

Promote the use of captured biogas in combined heat and power systems and/or renewable energy (wind, solar, etc.) to generate energy for use onsite as well as upgrades to more energy efficient equipment (pumps, motors, etc.).

<http://water.epa.gov/infrastructure/sustain/goinggreen.cfm>

- **Utilize Energy Star/Multi-media building and land design practices**

Consideration should be given to including building practices which have multi-media benefits, including energy efficiency, water conservation, and healthy indoor air quality. Apply building rating systems and tools, such as Energy Star, Energy Star Indoor Air Package, and Water Sense for building construction. http://www.energystar.gov/index.cfm?c=business.bus_bldgs and <http://www.usgbc.org/>

- **Implement Water Efficiency**

Water efficiency can make infrastructure systems more sustainable by reducing the quantity of water treated and distributed through the water supply system, and subsequently by the wastewater treatment and disposal systems. EPA is promoting water use practices that increase efficiency, eliminate waste, and conserve water resources, resulting in a decreased burden on our water resources. The WaterSense program, <http://www.epa.gov/watersense>, promotes the market for water-efficient products through the use of WaterSense-labeled products and the use of contractors certified through a WaterSense-labeled program. Water supply utilities can also decrease the burden on water and wastewater treatment systems by reducing the amount of drinking water lost from their leaking water distribution pipes. Additional details on the Sustainable Water Infrastructure can be found at <http://water.epa.gov/infrastructure/sustain/index.cfm>.

- **Source Management for Stormwater Runoff**

Green infrastructure and low impact development approaches can reduce, capture, and treat stormwater runoff at its source. Site-specific practices, such as green roofs, downspout disconnections, rain harvesting/gardens, planter boxes, and porous pavements are designed to mimic natural hydrologic functions and decrease the amount of impervious area and stormwater runoff. Preserving and recreating natural landscape features can create functional and appealing site drainage that treats storm water as a resource rather than a waste product.

<http://www.epa.gov/nps/lid>, and

<http://water.epa.gov/infrastructure/greeninfrastructure/>

- **Encourage cost-efficient, environmentally-friendly landscaping**

EPA's GreenScapes program provides cost-efficient and environmentally friendly solutions for landscaping. Designed to help preserve natural resources and prevent waste and pollution, GreenScapes encourages companies, government agencies, other entities, and homeowners to make holistic decisions regarding waste generation and disposal and the associated impacts on land, water, air, and energy use.

<http://www.epa.gov/wastes/conserve/tools/greenscapes/index.htm>

- **Use recycled materials in highway and construction projects.**

Many industrial and construction byproducts are suitable and available for use in road or infrastructure construction. <http://www.epa.gov/osw/conserve/imr/index.htm> Use of these materials can save money and reduce environmental impact. The Recycled Materials Resource Center has user guidelines and specifications for recycled material. <http://rmrc.wisc.edu/>

- **Safely Reuse and/or Recycle Project-related Debris and Waste**

The *Federal Green Construction Guide for Specifiers* includes a construction waste management specification. <http://www.wbdg.org/design/greenspec.php>

- **Utilize environmentally preferable purchasing**

Promote markets for environmentally preferable products by referencing EPA's multi-attribute Environmentally Preferable Purchasing guidance. <http://www.epa.gov/epp>